Oklahoma Academic Standards for Pre AP Algebra 2

Systems of Linear Equations and Inequalities	
Use a scatter plot to identify the correlation shown by a linear set of data.	3.1a, 3.2b
Approximate the best-fitting line for a set of data.	3.1, 3.1b
Use algebraic methods to solve linear systems using elimination and substitution.	2.2b
Use linear systems to model real-life situations.	2.2a
Use matrices to solve linear systems.	2.2b
Graph linear inequalities in two variables.	3.1, 3.1b
Graph a system of linear inequalities to find the solutions of the system.	2.2b
Use systems of linear inequalities to solve real-life problems.	2.2a
Use matrices (including Cramer's rule, inverse matrices, and row operations with augmented matrices) to solve linear systems.	2.2b
Use graphing calculator to solve linear systems.	2.2b
Solve systems of linear equations in three variables.	2.2b
Use linear systems in three variables to model real-life situations.	2.2a
Quadratic Functions	
Use a scatter plot to identify the correlation shown by a quadratic set of data.	3.1a, 3.2b
Approximate the best-fitting graph for a set of data.	3.1, 3.1b
Find domain and range of quadratic functions using algebraic, interval and set notations.	2.1d
Graph quadratic functions and identify intercepts and extrema.	2.1a, 2.3a, 2.3b
Factor quadratic expressions and solve quadratic equations by factoring.	2.3a
Find zeros of quadratic functions.	2.3a, 2.3b
Solve quadratic equations by finding square roots.	2.3a
Use quadratic equations to solve real-life problems.	2.3c
Solve quadratic equations with complex solutions and perform operations with complex numbers.	1.3a, 1.3b, 2.3a
Solve quadratic equations by completing the square.	2.3a
Solve quadratic equations using the quadratic formula.	2.3a
Solve quadratic functions given characteristics of their graphs.	2.3
Use technology to find quadratic models for data.	2.3
Polynomials and Polynomial Functions	
Find domain and range of polynomial functions using algebraic, interval, and set notations.	2.1d
Use properties of exponents to evaluate and simplify expressions involving powers.	2. , 2.1b, 2.1c
Use exponents and scientific notation to solve real-life problems.	2.6d
Graph a polynomial function and identify intercepts extrema.	2.1a, 2.6b,

	2.6c
Add, subtract, and multiply polynomials.	2.1b, 2.1c, 2.6a
Use polynomial operations in real-life problems.	2.6d
Factor polynomial expressions.	2.6a
Use factoring to solve polynomial equations.	2.6a, 2.6d
Divide polynomials and relate the result to the remainder theorem and the factor theorem.	1.2a, 2.1b, 2.1c
Find the rational zeros of a polynomial function.	2.6a, 2.6b, 2.6c
Use polynomial equations to solve real-life problems.	2.6d
Use the fundamental theorem of algebra to determine the number of zeros of a polynomial function.	2.6a, 2.6b
Use the graph of a polynomial function to answer questions about real-life situations.	2.6d
Use technology to find polynomial models for real-life data.	2.6d, 3.1a, 3.1b
Powers, Roots, and Radicals	
Evaluate nth roots of real numbers using both radical notation and rational exponent notation.	1.1a
Use nth roots to solve real-life problems.	1.1a, 1.1b
Use properties of rational exponents to evaluate and simplify expressions.	1.1a, 1.1b
Use properties of rational exponents to solve real-life problems.	1.1a, 1.1b
Perform operations with functions including power functions.	1.1a, 1.1b, 2.1b, 2.1c
Find inverses of linear functions and graph.	2.1e
Find inverses of nonlinear functions and graph.	2.1e
Graph square root and cube root functions.	2.1a
Use square root and cube root functions to find real-life quantities.	1.1a
Solve equations containing radicals/rational exponents.	1.1a, 1.1b, 1.2b
Use measures of central tendency and measures of dispersion to describe data sets.	3.2a, 3.2b, 3.2c, 3.2d